選択課題 5

______ 「水についてどれだけ知っているか?」

というWeb-siteがある。

A Sweet Briar College Learning Resource Chris Witcombe and Sang Hwang http://witcombe.sbc.edu/water/waterfacts.html

H20 - The Mystery, Art, and Science of Water

ここには、A. 36の水についての科学的知識(中には常識も含まれている)とB. 24の歴史的・文化的知見(青字)、C. それにアメリカの水事情についての知識(緑字)が2つ,合計62の知識が列挙されている。

- 1.36の水についての科学的知識の中で、今あなたがすでに知っている項目はいくつあるか?(テストではない)。
- 2. その中で、水ならではのユニークかつ価値があると思われる性質を7つ選び 出し、その理由を説明せよ。
- 3.24の歴史的・文化的知見の中で、時代を超え、国を超えた普遍的真理を言い当てていると思える知見を3つ選び出し、その理由を述べよ。

WHAT DO YOU KNOW ABOUT?

Water is an odourless, tasteless, transparent liquid at room temperature

Water is wet

Water covers about 70 percent of the earth's surface in the oceans, lakes, rivers, and glaciers

The ancient Egyptian Heliopolitan creation story recounts that the sun-god Atum (Re) reposed in the primordial ocean (Nun)

Ninety-seven percent of the water on the planet is in the form of salt water. Only 3 percent is fresh, and two-thirds of that is ice

Chemically, water is a compound of hydrogen and oxygen, its molecule consists of two atoms of hydrogen and one atom of oxygen – H2O

The physical and chemical properties of water are extraordinarily complicated and incompletely understood

In Assyro–Babylonian mythology, first the gods and subsequently all beings arose from the fusion of salt water (Tiamat) and sweet water (Apsu)

Water is necessary for life

Water falls from the sky as rain and issues from the ground in springs

The water molecule is not linear but bent in a special way. As a result, part of the molecule is negatively charged and part positively charged

The holy books of the Hindus explain that all the inhabitants of the earth emerged from the primordial sea

Water constitutes the greater part of the fundamental substance (protoplasm) of which animal and plant bodies are made

Sap of plants and blood of animals contain large quantities of water

At the beginning of the Judeo-Christian story of creation, the spirit of God is described as "stirring above the waters," and a few lines later, God creates "a firmament in the midst of the waters to divide the waters" (Genesis 1:1-6)

Water is essential to the manufacture of starch by plants

In ancient Greece, the souls of the dead were ferried across the dark waters of the River Styx $\,$

Many foods, such as milk and fruit, have high water content

For drinking purposes, water may need to be purified

Water present in the earth is called ground water (its upper level is called the water table)

When drunk, the waters of the Lethe, a river in Hades, produced forgetfulness

Water's composition by weight is one part of hydrogen to eight of oxygen (or 11.1 percent of hydrogen and about 88.9 percent of oxygen)

Water is an agent in erosion of the land

Water is the FONS ET ORIGO, the fount and origin of all forms of life, and naturally connected with women

Water is colorless in small amounts, but exhibits a bluish tinge in large quantities

Aphrodite, the ancient Greek goddess of love, was born of the sea

Water is relatively incompressible

In the Koran are the words "We have created every living thing from water"

By convention, one cubic centimeter of water at 4°C. (its temperature at maximum density) weighs one gram

Water is linked with the moon through the movement of tides and by its moon-like flowing, shape-changing quality

In Christianity, baptism links the concepts of the water of life with the waters of purification

When cooled to its freezing temperature (0°C., 32°F., under standard pressure), water changes to a colorless, crystalline solid (ice)

The Garden of Eden is watered by a river that divided into four rivers

Water is less dense as ice than as a liquid at 4°C.

In Judaeo-Christian culture, God is called "the fountain of living waters" (Jeremiah 2.13)

Unlike other liquids, water expands in freezing

In 1513, while searching for the fountain of youth, the Spanish conquistador Ponce de Léon discovered Forida.

When water is heated to its boiling point (100°C., 212°F., under standard pressure), it vaporizes to steam

In the cosmogony of Mesopotamian peoples, the abyss of water was regarded as a symbol of the unfathomable, impersonal Wisdom

Scientists believe that the structure of liquid water consists of aggregates of water molecules that form and re-form continually

At ordinary temperatures, water undergoes evaporation

In China, the water of the fountain at Pon Lai was believed to confer a "thousand lives on those who drink it," according to Wang Chia,

Completely pure water is a poor conductor of electricity

In dreams, birth is usually expressed through water-imagery

The Babylonian moon goddess, Ishtar, was associated with sacred springs, and her temples were often situated in natural grottoes from which springs emanated

Water is one of the best known solvents

In China, water is considered the specific abode of the dragon, because all life comes from the waters

In 218 CE, after defeating the Romans, Hannibal and his armies stopped to imbide the waters at Perrier in the south of France

Water power is of major economic importance

In the Canticle of the Sun, St. Francis of Assisi praises God for water: "Praised be Thou, O Lord, for sister water, who is very useful, humble, precious, and chaste"

In natural waters, various substances are found dissolved

In India, the sacred River Ganges embodies for Hindus the water of life

Mineral water contains a great variety and quantity of minerals (usually a compound of calcium, magnesium, or iron)

Salt water contains a large amount of sodium chloride (common salt)

In Japan, water prefigures the purity and pliant simplicity of life

Certain water is called "hard"

The Roman philosopher Seneca declared that "Where a spring rises or a water flows there ought we to build altars and offer sacrifices"

The United States withdraws 339 billion gallons of ground and surface water a day

In the Vedas, water is referred to as the "most maternal" (mätritamäh)

Heavy water (deuterium oxide) was discovered by Harold C. Urey

The lotus-stream of the Buddha or Boddhisattva rises up from the waters of the soul, in the same way the spirit, illumined by knowledge, frees itself from passive existence

The United States uses three times as much water a day as the average European country, and many, many times more water than most developing nations